080/03737 A02

IN THE CLAIMS

Kindly amend the claims as follows:

1-33. (cancelled)

34. (Currently amended) A method of electrical impedance testing of a breast region of a patient, comprising:

applying electrical excitation signals to the patient;

acquiring electrical signals from the breast region of the patient, through a plurality of elements of a multi-element probe including at least two rows and two columns of sensing elements, responsive to the applied signals; and

determining a single value of an impedance measure of the breast region, responsive to the signals acquired through more than one of the plurality of elements of the probe.

35. (Previously presented) A method according to claim 34, comprising displaying the determined value of the impedance measure to a user.

36. (Previously presented) A method according to claim 34, wherein signals are acquired through elements of the probe placed on the region and elements of the probe not on the region and wherein the value of the impedance measure is determined based only on signals from elements placed on the region.

37. (Previously presented) A method according to claim 34, wherein the value of the impedance measure is determined based only on signals from elements whose values lie within a specified range.

38. (Previously presented) A method according to claim 34, wherein determining the single value comprises selecting a sub-group of elements and determining the value based on the selected elements.

39. (Previously presented) A method according to claim 38, wherein selecting the sub-group of elements comprises selecting based on the signals acquired through the

2

080/03737 A02

elements.

40. (Previously presented) A method according to claim 38, wherein selecting the sub-group of elements comprises selecting an area of an impedance image.

41. (Previously presented) A method according to claim 38, wherein the value of the impedance measure is determined based only on signals from elements whose values are not among the highest or lowest values of all the elements.

42. (Previously presented) A method according to claim 38, wherein the value of the impedance measure is determined based only on signals from elements whose values are not indicative of contact problems.

43. (Previously presented) A method according to claim 34, wherein the region for which the value of the impedance measure is determined comprises a region chosen by a user.

44. (Currently amended) A method of electrical impedance testing of a breast region of a patientaccording to claim 34, comprising:
         applying electrical excitation signals to the patient;
         acquiring electrical signals from the breast region of the patient, through a plurality of elements of a multi-element probe, responsive to the applied signals;
         generating an impedance map of the region responsive to the acquired signals and wherein
         determining athe single value of anthe impedance measure of the breast region comprises determining-for a region of pixels of the impedance map, responsive to the acquired signals.

45. (Previously presented) A method according to claim 34, comprising comparing the single value of the impedance measure of the breast region to a value of a reference region.

46. (Previously presented) A method according to claim 34, wherein values of the

080/03737 A02

impedance measure are determined separately for each of the plurality of the probe elements used in determining the single value, and wherein the single impedance measure is determined as a function of the impedance measure of the plurality of elements.

47. (Previously presented) A method according to claim 46, wherein the single impedance measure for the region is determined as a maximum of the impedance measure of the plurality of elements.

48. (Previously presented) A method according to claim 34, wherein acquiring the electrical signals comprises acquiring through a flat multi-element probe in which substantially all the elements are oriented in a same direction.

49. (Currently amended) A method according to claim 44̶3̶4̶, wherein acquiring the electrical signals comprises acquiring through a multi-element probe including a rectangular matrix of elements, including at least two columns and two rows.

50. (Previously presented) A method according to claim 34, wherein the impedance measure comprises a phase.

51. (Previously presented) A method according to claim 34, wherein the impedance measure comprises a polychromatic measure.

52. (Currently amended) Apparatus for electrical impedance testing of a breast region of a patient, comprising:

an electrode for providing electrical signals to the patient;

a multi-element probe, including at least 16 elements, for acquiring electrical signals from the patient, through a plurality of elements, responsive to the provided signals; and

a processor adapted to determine a single value of an impedance measure of the breast region, responsive to signals acquired through more than one of the plurality of elements of the probe from the region.

4

080/03737 A02

53. (Previously presented) Apparatus according to claim 52, comprising a display for providing the determined value of the impedance measure, to a user.

54. (Previously presented) Apparatus according to claim 52, comprising a controller adapted to acquire signals through elements of the probe placed on the region and elements of the probe not on the region and wherein the processor determines the value of the impedance measure based only on signals from elements placed on the region.

55. (Previously presented) Apparatus according to claim 52, comprising an input interface adapted to receive a user indication of the region for which the value of the impedance measure is determined.

56. (Previously presented) Apparatus according to claim 52, wherein the processor is adapted to generate an impedance map of the region responsive to the acquired signals and to determine the single value of the impedance measure for a region of pixels of the impedance map.

57. (Previously presented) Apparatus according to claim 52, wherein the processor is adapted to compare the single value of the impedance measure of the breast region to a value of a reference region.

58. (Previously presented) Apparatus according to claim 52, wherein the processor is adapted to determine values of the impedance measure separately for each of the plurality of the probe elements used in determining the single value, and to determine the single impedance measure as a function of the impedance measure of the plurality of elements.

59. (Previously presented) Apparatus according to claim 58, wherein the processor is adapted to determine the single impedance measure for the region as a maximum of the impedance measure of the plurality of elements.

60. (Previously presented) Apparatus according to claim 52, wherein the probe

080/03737 A02

comprises a flat multi-element probe in which substantially all the elements are oriented in a same direction.

61. (Previously presented) Apparatus according to claim 52, wherein the probe comprises a multi-element probe including a rectangular matrix of elements.

62. (New) A method according to claim 34, wherein acquiring the electrical signals comprises acquiring through a multi-element probe including at least 16 elements.